

MATH PRACTICE FOR ECONOMICS



ACTIVITY 2

MAKING A PROFIT

You and two of your friends are planning to run a concession stand at the park from Memorial Day to Labor Day. The three of you will share the work and the profits for the summer. The question is: Will there be any profits?

You are going to sell soda, lemonade, peanuts, and popcorn. You have a good idea of how much you will be able to sell because you have talked to the people who ran the stand the previous summer. You estimate that you can sell at least 200 sodas, 100 cups of lemonade, 50 bags of peanuts, and 300 bags of popcorn every week. You are going to charge 75¢ for soda, 50¢ for lemonade, \$1 for peanuts, and 55¢ for popcorn.

Directions: Follow these five steps to calculate your profits.

Step 1: Figure below the amount of money you can expect to take in for one week.

Soda	$$.75 \times 200$	=	(1) _____
Lemonade	$\$ ______ \times ______$	=	(2) _____
Peanuts	$\$ ______ \times ______$	=	(3) _____
Popcorn	$\$ ______ \times ______$	=	(4) _____
	One Week's Revenue		(5) _____

Step 2: Now use the figure for the week to compute your expected revenue for the summer (14 weeks).

(6) _____

Does this figure represent your profits for the summer? **(7)** _____

Unfortunately, you will not just be taking in money. You will be paying out money for the food you will sell and to rent the stand. Most other businesses have many other expenses, including labor. Since you and your friends will work the stand yourselves, you will not have any labor costs. Your costs are just for food and rent.

You find out that it will cost \$560 to rent the stand for the summer. You can buy a week's worth of soda for \$90, lemonade for \$25, peanuts for \$50, and popcorn for \$65. What will your costs for the summer be?

Step 3: Do your computations below:

Soda	$\$ ______ \times ______$	=	(8) _____
Lemonade	$\$ ______ \times ______$	=	(9) _____
Peanuts	$\$ ______ \times ______$	=	(10) _____
Popcorn	$\$ ______ \times ______$	=	(11) _____
Rent		=	(12) _____
	Total Costs		(13) _____

Step 4: Now that you have a reasonable estimate of both your total revenue and your total costs for the summer, use the following equation to project what your profits for the summer will be:

$$\begin{array}{ccccccc} \text{Revenue} & - & \text{Costs} & = & \text{Profit} & & \\ \text{(14)} ______ & - & ______ & = & ______ & & \end{array}$$

Step 5: Do not forget that the profits have to be split three ways. What will be your share of the summer's profits?

(15) _____